

Suffolk County Department of Public Works
Division of Sanitation

STANDARDS FOR RECHARGE OF WWTP EFFLUENT

Recharge facilities shall be designed in accordance with one of the following:

1. Open recharge beds (preferred method).
2. Shallow sub-surface disposal.
3. Deep sub-surface disposal.

All recharge facilities must meet the Department of Health Services buffer distance standards.

Open Recharge beds:

- a. Design leaching capacity is 5GPD/SF without polishing filter and 10 GPD/SF with polishing filter based on bottom area.
- b. Install 100% capacity and provide sufficient land for 100% expansion.
- c. Recharge beds shall be divided into 25% sections and valved to allow rotation of beds.
- d. Bottom of recharge bed shall be a minimum of 2.0' above the highest recorded groundwater elevation.

Shallow Sub-Surface Disposal:

- a. Design using 8' or 10' diameter leaching rings.
- b. Maximum effective depth per pool shall be 4'.
- c. The total depth of pool shall not exceed 6.67' which includes: 4.0' pool; 0.67' flat, H2O, top slab; 0.67 casting and 1.33' earth cover.
- d. Castings to grade shall be installed on the first and last pool and every fifth pool in between. All other top slabs shall have a reinforced concrete cover.
- e. The pools shall be arranged abutting each other in rows with a clear spacing of 8.0' between rows.
- f. Installation of pools must be in a grass area. No pavement, trees, bushes, shrubs or any other obstruction is allowed in or over the leaching area.
- g. Connecting pipes between pools shall be a minimum of 8" diameter and set at a minimum of 6" and a maximum of 1' from the bottom of the pool, except for the influent pipe to the first pool of each row which shall be set directly below the top slab.
- h. 200% of calculated leaching area shall be installed at the time of initial construction of a WWTP.
- i. The number of pools shall be calculated using only side wall area at a rate of 5 GPD/SF without polishing filters and 10 GPD/SF with polishing filters.
- j. Pools shall be valved to allow rotation in 25% increments.
- k. All soils between rows and pools shall be clean sand and gravel, and shall extend beyond the end rows a minimum of 3.0', and below the bottom of each pool a minimum of 3.0'.

- l. All pool bottoms shall be installed a minimum of 3.0' above the highest recorded groundwater elevation.

Deep Sub-Surface Disposal:

- a. Design using all 8.0' or all 10.0' diameter leaching rings.
- b. Maximum effective depth per pool shall not exceed 16.0'.
- c. The total depth of pool shall not exceed 20.0'.
- d. Top slab shall be H20 loading. Dome top may be used provided total depth is not exceeded.
- e. The pools shall be arranged in five pool clusters (a distribution pool with 4 satellite pools) with a minimum clearance between pools of 8.0', edge to edge.
- f. Installation of pools must be in a grass area. No pavement, trees, bushes, shrubs or any other obstruction is allowed in or over the leaching area.
- g. All distribution pools shall have a casting to grade. All other pools shall have a reinforced concrete cover.
- h. Connecting pipes shall be a minimum of 6" diameter and shall have a minimum slope of 1% between pools.
- i. Effluent pipes from a distribution pool shall have an 18" drop tee and be set a minimum of 3" below the invert of the influent pipe.
- j. Effective depth shall be measured from the invert of the effluent pipe of each pool and all pools shall have the same effective depth.
- k. Pipes shall not enter or exit a pool through a dome top.
- l. 200% of calculated leaching area shall be installed at the time of initial construction of a WWTP and 100% additional non-disturbed area shall be provided.
- m. The number of pools shall be calculated using only side wall area at a rate of 5 GPD/SF without polishing filters and 10 GPD/SF with polishing filters.
- n. Pools shall be valved to allow rotation in 25% increments.
- o. All soils between pools shall be clean sand and gravel, and shall extend beyond the outer pools a minimum of 3.0', and below the bottom of each pool a minimum of 3.0'.
- p. All pool bottoms shall be installed a minimum of 3.0' above the highest recorded groundwater elevation.
- q. Soils must be compacted under connecting pipes between pools. Water jetting or puddling will be allowed.